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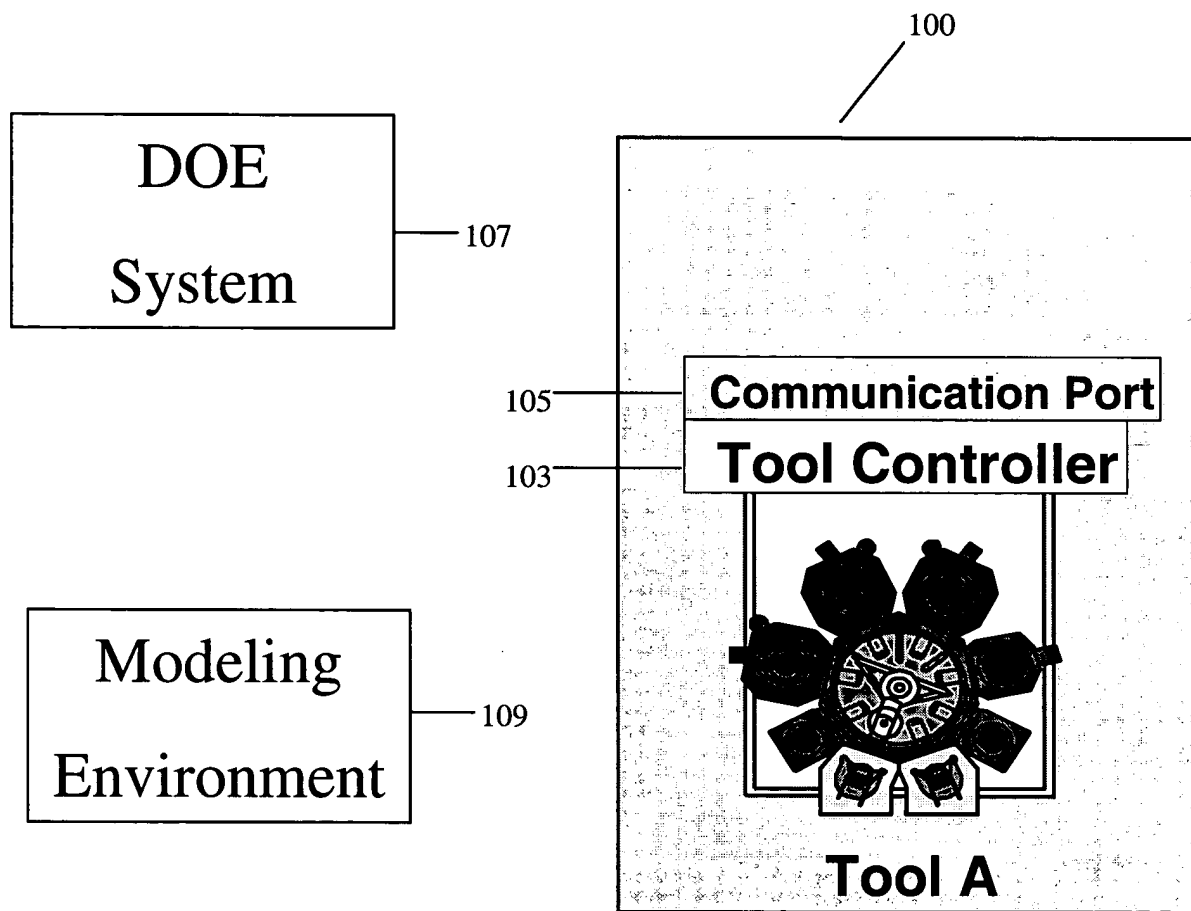
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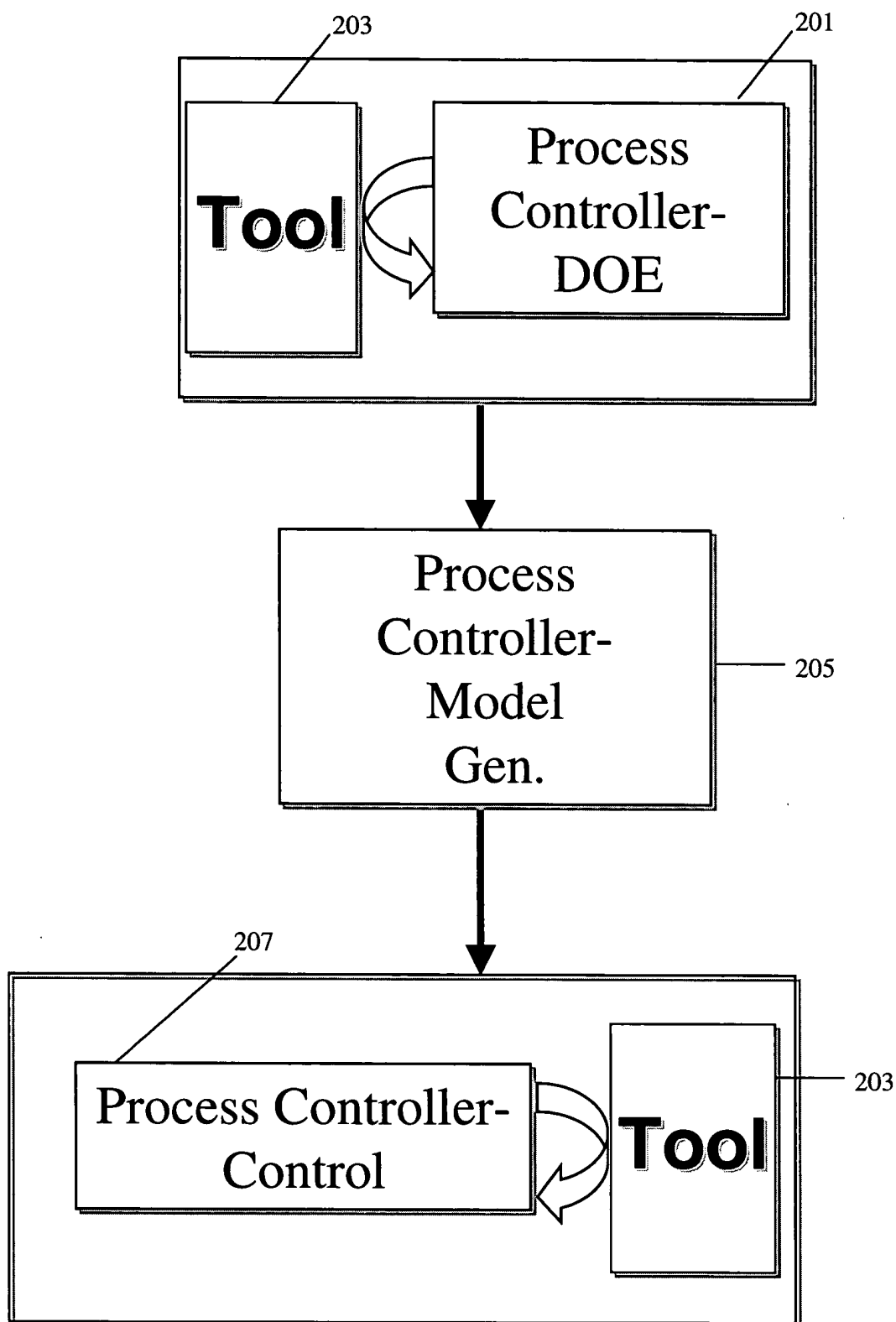
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**FIG. 1**



**FIG. 2**

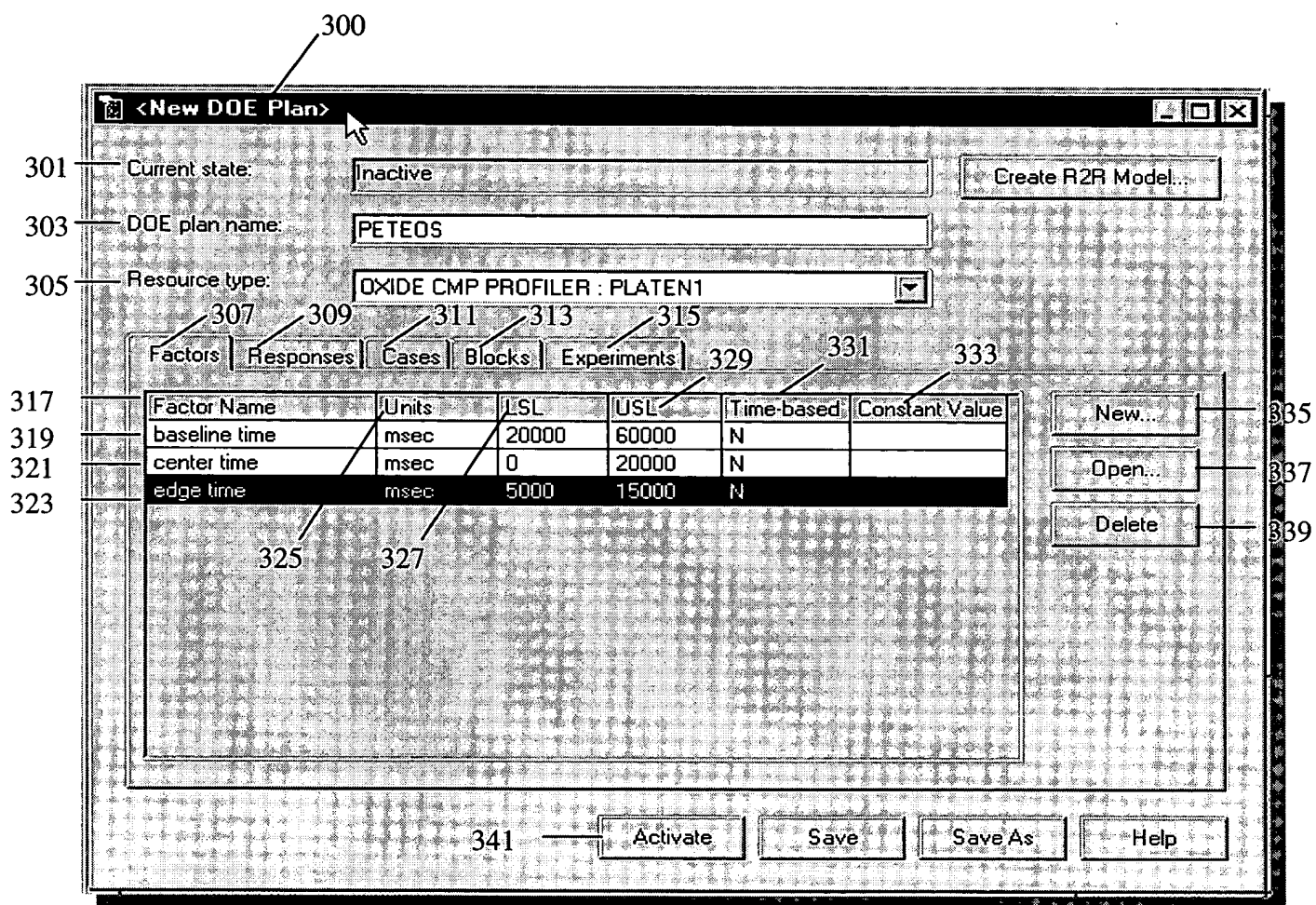


FIG. 3

<New DOE Plan>

Current state: Inactive Create R2R Model...

DOE plan name: PETEOS

Resource type: OXIDE CMP PROFILER : PLATEN1

309

Factors Responses Cases Blocks Experiments

Response Name	Units	LSL	USL	Type	Default Value
Thickness	Angstromm	2000	6000	Raw Data Par.	4000
pad life	hrs	0	40	Measured Vari	

New...  
Open...  
Delete

Activate Save Save As Help

FIG. 4

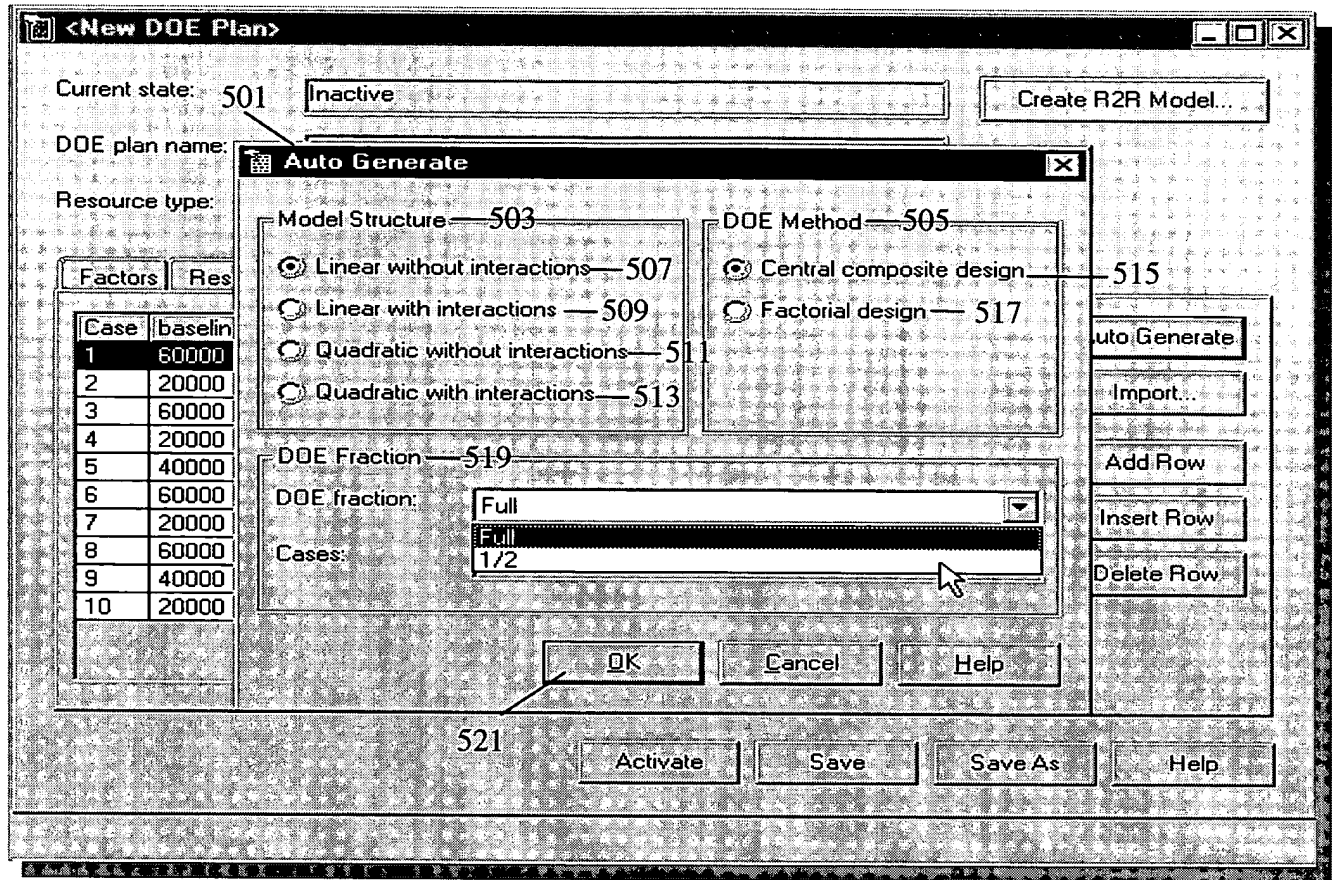
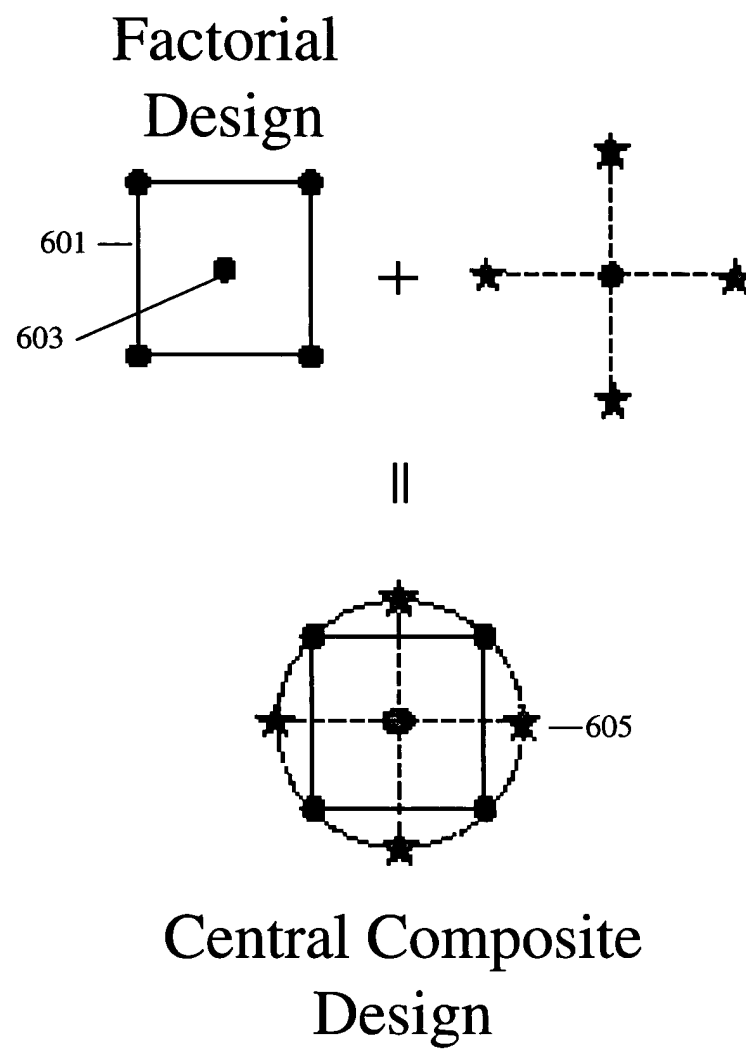


FIG. 5



**FIG. 6**

<New DOE Plan>

Current state: Inactive Create R2R Model...

DOE plan name: PETEOS

Resource type: OXIDE CMP PROFILER : PLATEN1

311

Factors Responses Cases Blocks Experiments

Case	baseline time	center time	edge time
1	60000	0	15000
2	20000	0	5000
3	60000	20000	15000
4	20000	0	15000
5	40000	10000	10000
6	60000	0	5000
7	20000	20000	5000
8	60000	20000	5000
9	40000	10000	10000
10	20000	20000	15000

711

Auto Generate

Import...

Add Row

Insert Row

Delete Row

701

703

705

707

709

Activate Save Save As Help

FIG. 7



FIG. 7A

The screenshot shows a software window titled "SA BPSG". At the top, there are three input fields: "Current state:" with the value "Inactive", "DOE plan name:" with the value "SA BPSG", and "Resource type:" with a dropdown menu showing "CVD PRODUCER : PE-CVD". To the right of these fields is a button labeled "Create R2R Model..". Below these fields is a tabbed interface with five tabs: "Factors", "Responses", "Cases", "Blocks", and "Experiments". The "Blocks" tab is currently selected. Inside the "Blocks" tab, there is a table with two columns: "Block Number" and "Block Description". The table contains two rows: row 1 with "1" and "low kit", and row 2 with "2" and "high kit". To the right of the table are three buttons: "New..", "Open..", and "Delete..". At the bottom of the window, there is a toolbar with four buttons: "Activate", "Save", "Save As", and "Help".

SA BPSG

Current state: Inactive

DOE plan name: SA BPSG

Resource type: CVD PRODUCER : PE-CVD

Create R2R Model..

Factors Responses Cases Blocks Experiments

Block Number	Block Description
1	low kit
2	high kit

New..

Open..

Delete..

Activate Save Save As Help

# FIG. 7B

**PE TEOS**

Current state:

DOE plan name:

Resource type:

Factors Responses Cases Blocks Experiments

Experiment	Block	Case	rfpower_1	rfpower_2	spacing_1	spacing_2	steptime
1	1	1	700	700	250	250	55000
2	1	2	650	650	245	245	55000
3	1	3	700	700	245	245	55000
4	1	4	700	700	250	250	55000
5	1	5	650	650	250	250	55000
6	1	6	650	650	255	255	55000
7	1	7	750	750	245	245	55000
8	1	8	750	750	255	255	55000
9	1	9	750	750	250	250	55000
10	1	10	700	700	255	255	55000
11	2	1	700	700	250	250	55000

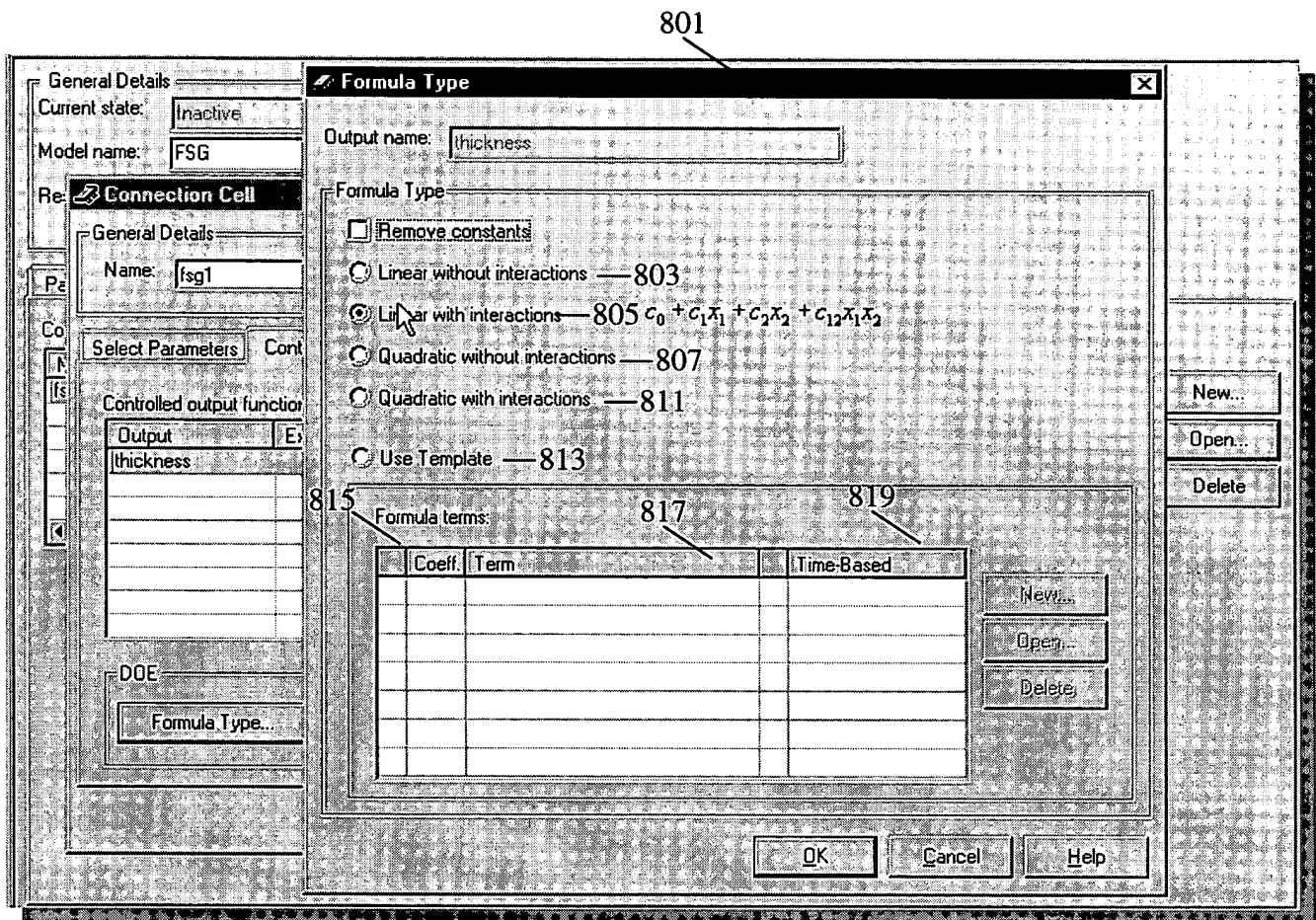
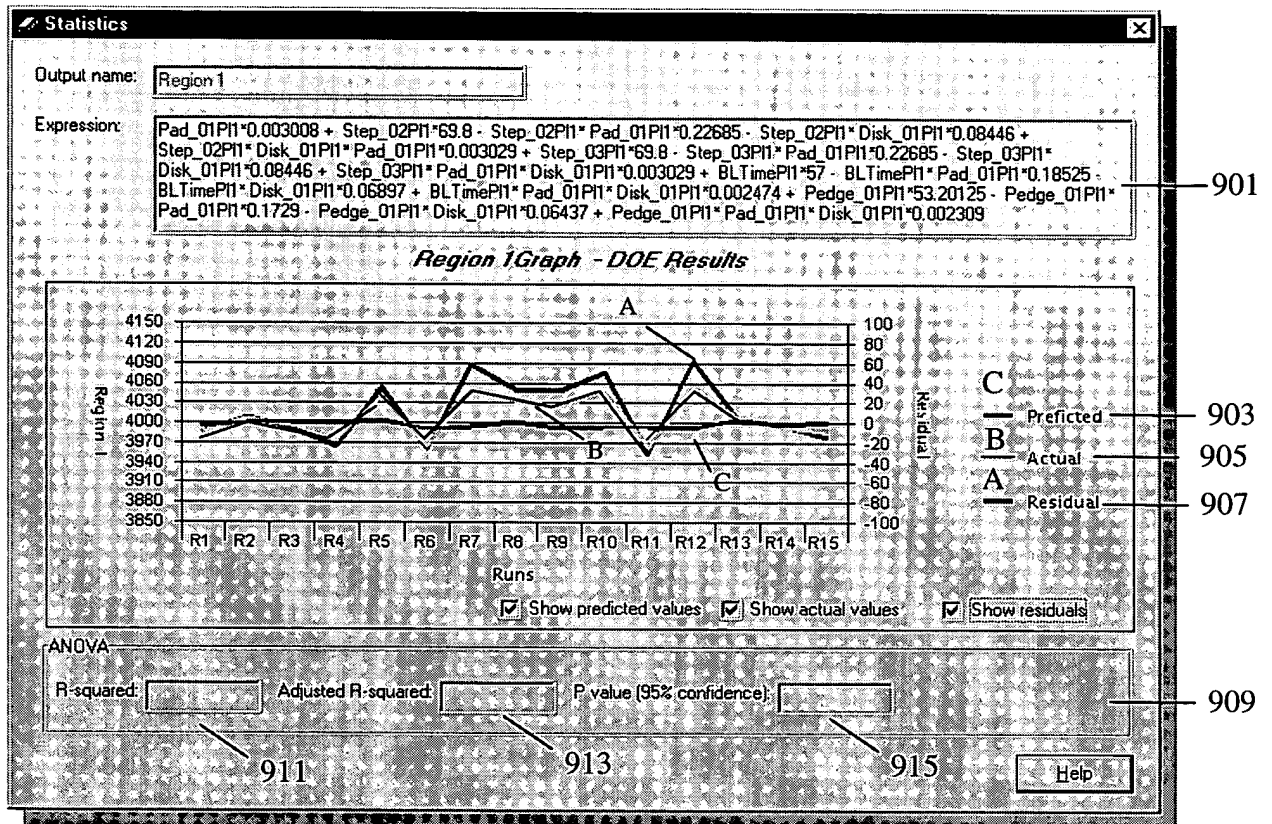
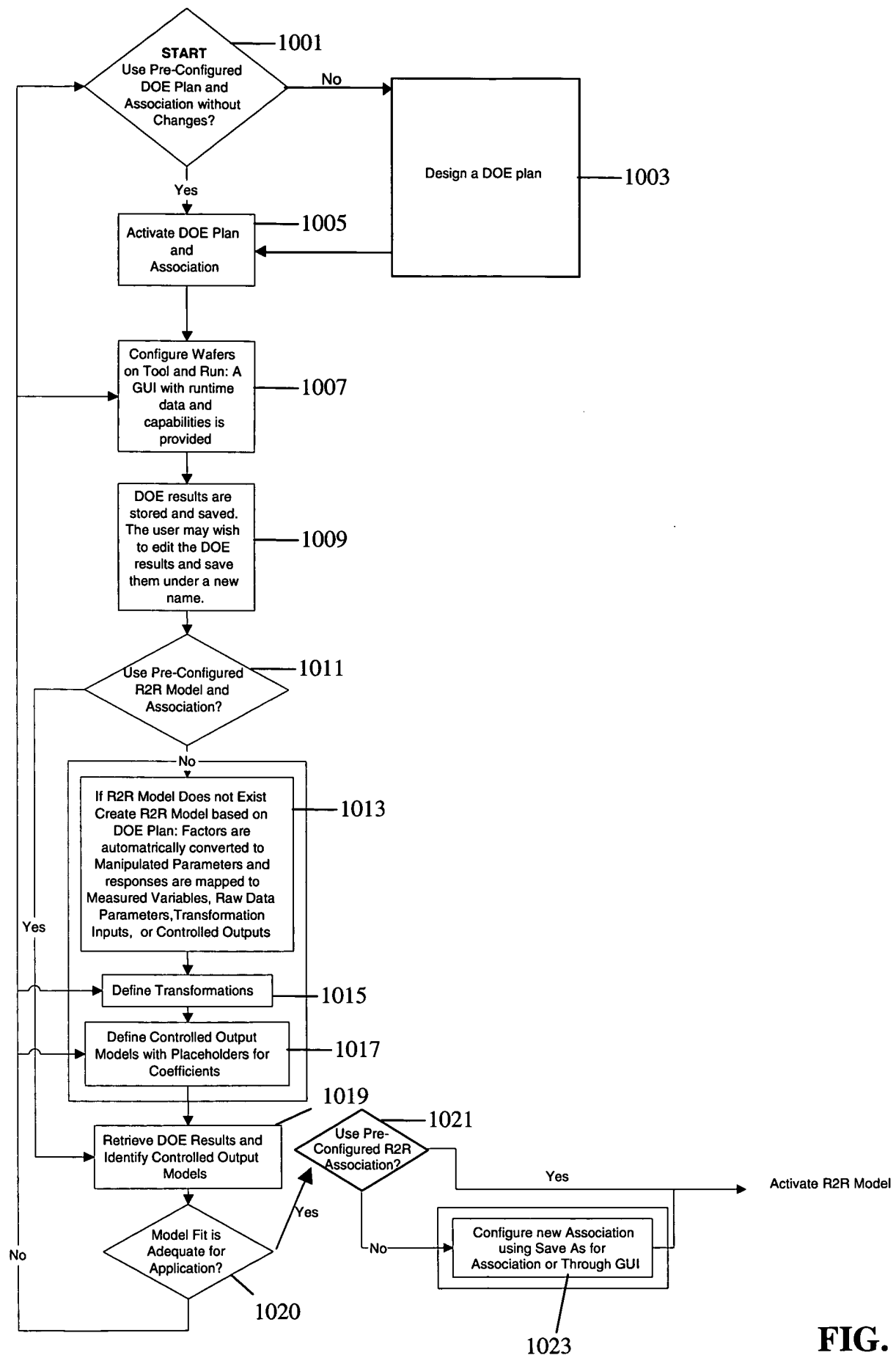


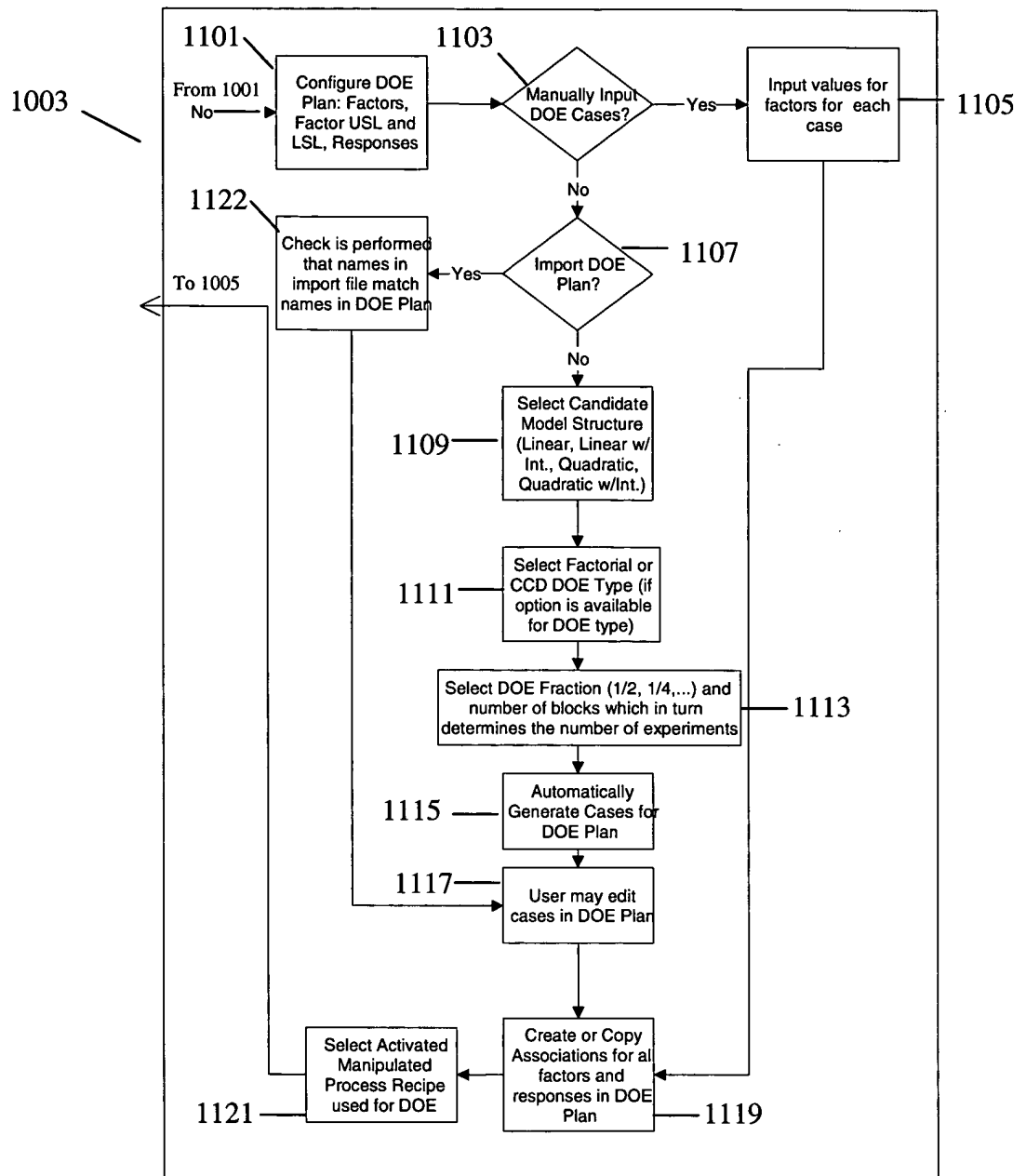
FIG. 8



**FIG. 9**



**FIG. 10**



**FIG. 11**

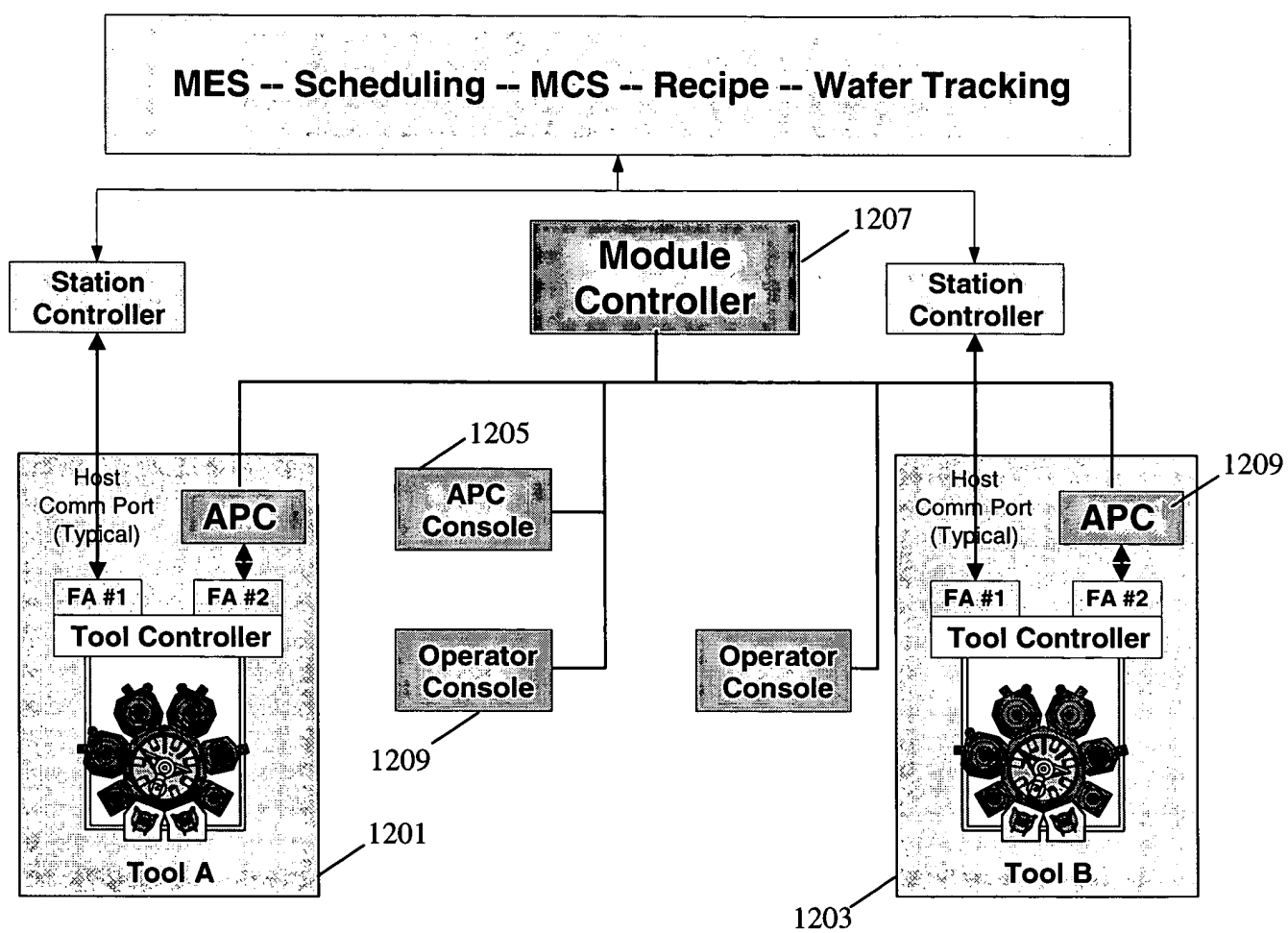
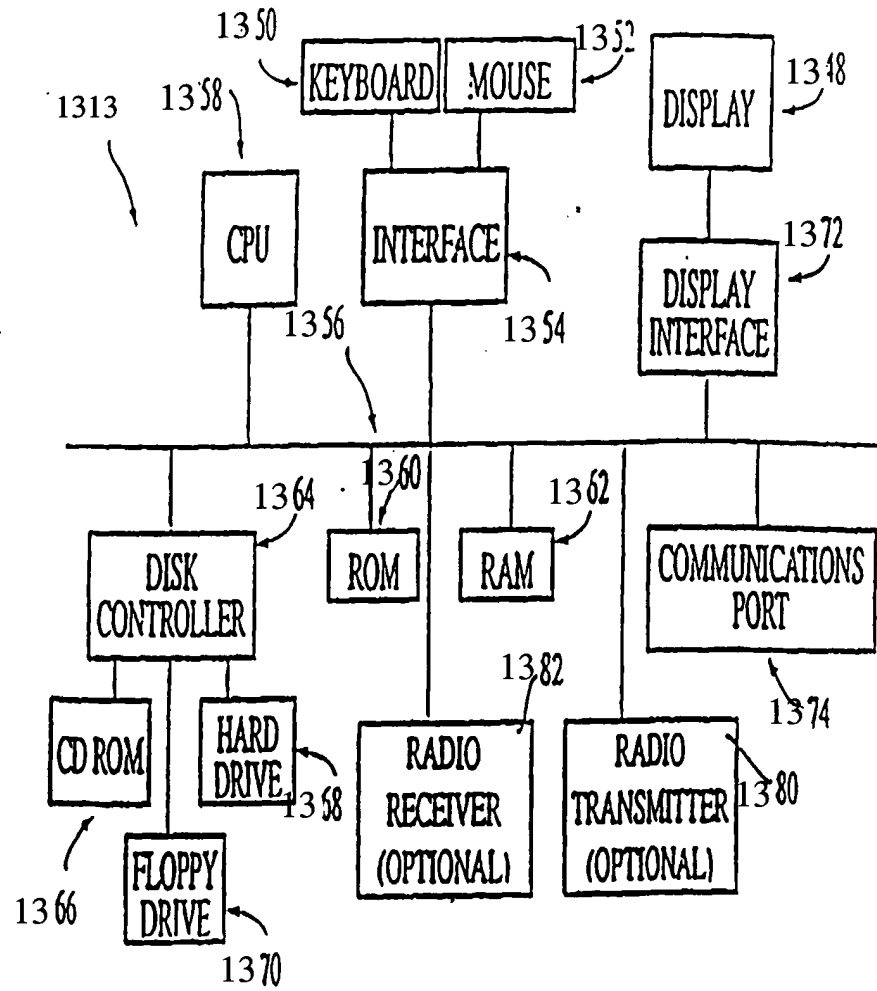
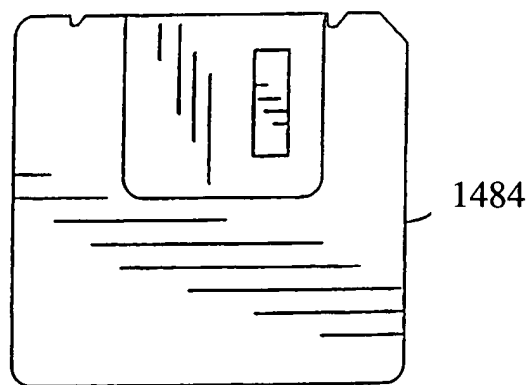


FIG. 12



**FIG.13**





**FIG. 14**